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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------|------------------|
| 09/733,156   | 12/08/2000  | Frank Kelly          | PD-200070                 | 2112             |
| 7590 02/04/2005  |             |                      |                           |                  |
| Hughes Electronics Corporation<br>Patent Docket Administration<br>P.O. Box 956<br>Bldg. 1, Mail Stop A109<br>El Segundo, CA 90245-0956 |             |                      | EXAMINER<br>WONG, BLANCHE |                  |
|  |             |                      | ART UNIT<br>2667          | PAPER NUMBER     |
| DATE MAILED: 02/04/2005  |             |                      |                           |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 09/733,156             |  | KELLY ET AL.        |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Blanche Wong           |  | 2667                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 and 27-40 is/are allowed.
- 6) ☒ Claim(s) 17-23 and 26 is/are rejected.
- 7) ☒ Claim(s) 24 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 17-19,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta (U.S. Pat No. 5,982,761) in view of Eilts (U.S. Pat No. 6,799,019).

With regard to claim 17, Dutta discloses a method for providing a communication timing information from a control station 140 (LES), comprising:

generating a timing marker (slot markers, col. 14, ln. 28-31); and

providing the timing marker and the control station timing delay in a message (network management data, col. 14, ln. 11-15) received by a remote user.

However, Dutta fails to explicitly show determining a control station timing delay, as recited in claim 17.

In an analogous art, Eilts disclose a base station (control station) within a TDMA system of time slots correction (see Fig. 3) with a delay circuit 9 that adds delay (control station timing delay) to the output of the base station, col. 3, ln. 62-63, and continually alters (determining a control station timing delay) the delay to compensate for the delay of the preprocessing circuitry.

A person of ordinary skill in the art would have been motivated to employ Eilts in Dutta in order to obtain an internal processing delay compensation. The suggestion/motivation to do so would have been to provide for proper timing of the data burst transmissions (col. 1, ln. 32) without disturbing the normal timing mechanism of the base station or requiring any reprogramming of the base station software (col. 2, ln. 39-41). At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Eilts and Dutta to obtain the invention as specified in claim 17.

With regard to claims 18,22, Dutta further discloses a timing marker (slot markers, col. 14, ln. 28-31) that is a superframe marker (superframe begins (a first fixed interval, as recited in cl. 22) with the time-critical information of the R-type network control data and slot marker is an R-type network control data, col. 15, ln. 66-67).

With regard to claim 19, Dutta further discloses a superframe marker that is provided to a timing section (superframe begins with the time-critical information of the R-type network control data of the RCDP and RCDP is the return channel descriptor packet that is part of the message frame, col. 15, ln. 55 and ln. 66-67) of the control station (message data are primarily user-generated and user-generated messages flow in both directions, col. 13, ln. 54-60).

3. Claims 20,21,23,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta and Eilts as applied to claim 17 above, and further in view of Kelly et al. (U.S. Pat No. 6,834,039).

With regard to claim 20, the combination of Dutta and Eilts discloses the method of claim 17. However the combination fails to disclose a message that includes a time delay associated with satellite drift, as recited in claim 20.

In an analogous art, Kelly discloses a satellite drift correction, col. 11, ln. 20.

A person of ordinary skill in the art would have been motivated to employ Eilts in Dutta in order to obtain a time delay associated with satellite drift. The suggestion/motivation to do so would have been to provide for a system, apparatus, and method for assigning uplink bandwidth depending on the user's demand for return channel access. Kelly, col. 4, ln. 49-51. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Kelly, and the combination of Eilts and Dutta, to obtain the invention as specified in claim 20.

With regard to claim 21, the combination of Dutta and Eilts discloses the method of claim 17. However the combination fails to disclose a control station timing delay corresponds to a previous timing marker provided in a prior message to the remote user, as recited in claim 21.

In an analogous art, Kelly discloses an internal NOC delay (control station timing delay) and satellite drift correction for a previous superframe marker (a previous timing marker) in a prior SFNP (a prior message to the remote user), col. 11, ln. 18-20.

A person of ordinary skill in the art would have been motivated to employ Kelly in the combination of Eilts and Dutta in order to obtain a control station timing delay corresponds to a previous timing marker provided in a prior message to the remote user. The suggestion/motivation to do so would have been to provide for a system, apparatus, and method for assigning uplink bandwidth depending on the user's demand for return channel access. Kelly, col. 4, ln. 49-51. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Kelly, and the combination of Eilts and Dutta, to obtain the invention as specified in claim 21.

With regard to claim 23, the combination of Dutta and Eilts discloses the method of claim 17. However the combination fails to disclose an inroute channel message to an inroute receiver, as recited in claim 23.

In an analogous art, Kelly discloses a transmit channel in transceiver (an inroute receiver) (col. 8, ln. 8-9) and an inroute channel, col. 8, ln. 11.

A person of ordinary skill in the art would have been motivated to employ Kelly in the combination of Eilts and Dutta in order to obtain an inroute channel and receiver. The suggestion/motivation to do so would have been to provide for a system, apparatus, and method for assigning uplink bandwidth depending on the user's demand for return channel access. Kelly, col. 4, ln. 49-51. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Kelly, and the combination of Eilts and Dutta, to obtain the invention as specified in claim 23.

With regard to claim 26, the combination of Dutta and Eilts discloses the method of claim 17. However the combination fails to disclose a message to the remote user is broadcast on an asynchronous DVB transport stream, as recited in claim 26.

In an analogous art, Kelly discloses DVB transport streams, col. 8, ln. 15.

A person of ordinary skill in the art would have been motivated to employ Kelly in the combination of Eilts in Dutta in order to obtain DVB transport streams. The suggestion/motivation to do so would have been to provide for a system, apparatus, and method for assigning uplink bandwidth depending on the user's demand for return channel access. Kelly, col. 4, ln. 49-51. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Kelly, and the combination of Eilts and Dutta, to obtain the invention as specified in claim 26.

### ***Response to Arguments***

4. With regard to claims 17-19 and 21-22, Applicant claims that "Dutta does not teach determining a control station delay and including the control station delay in a message that is sent to a remote user," p. 19, para. 3. It is explained that "the internal delay that occurs within the NOC between the time the superframe marker pulse is created and the time it is actually transmitted in a superframe numbering packet in a message format from the NOC, p. 19, para. 4. However, the claims do not recite whether the control station timing delay is an internal delay that occurs within a NOC. Specifically, Applicant claims that the cited passages (Dutta, col. 19, ln. 28-42 and col.

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11, ln. 58 – col. 12, ln.3) does not teach “measuring and compensating for internal processing delays that occur at the control station between the time a superframe marker pulse is generated and the time it is actually broadcast as part of a superframe number packet,” p. 20, para. 1. Examiner has provided reference Eilts to show a TDMA system of time slots (see Fig. 3) correction with a delay circuit 9 that adds delay (internal processing delay) to the output (broadcast) of the base station, col. 3, ln. 62-63, and continually alters (measures and compensate) the delay to compensate for the delay of the preprocessing circuitry.

***Allowable Subject Matter***

5. Claims 1-16,27-42 are allowed.
6. Claims 24,25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

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January 28, 2005



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